# Request to Archive With The National Centers for Environmental Information For U.S. Climate Reference Network Quality-Controlled FTP Products Provided by NCEI

### 2018-11-29

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

### 1. Who is the primary point of contact for this request?

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### 2. Name the organization or group responsible for creating the dataset.

DOC/NOAA/NESDIS/NCEI > National Centers for Environmental Information, NESDIS, NOAA, U.S. Department of Commerce

# 3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

Please refer to previous R2As for details on USCRN network and observations. This R2A covers DSI 3287\_01 (FTP Products). The USCRN produces several quality-controlled "product" files available to external users via FTP. Subhourly (5-minute), hourly, daily, and monthly product data files for variables such as air temperature, precipitation, global solar radiation, relative humidity, surface IR temperature and soil moisture/soil temperature at all stations. Not all variables are available in every product. As of 2019-02-28, USCRN will include a new soil product called "Standardized Soil Moisture" to be archived under the current DSI (3287–01).

### 4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2000-11-27

Ongoing as continuous updates to the data record

### 5. Edition or version number(s) of the dataset:

Each product has different version numbers but the main CRN dataset version number is 2.1.1 as of 2018-11-28.

### 6. Approximate date when the dataset was or will be released to the public:

2012-06

### 7. Who are the expected users of the archived data? How will the archived data be used?

Typical requests to get Archived FTP Products will come from sophisticated users interested in very large portions of the data set, especially those needing 5-minute data for a variety of scientific and application purposes. Most user inquiries are satisfied by the USCRN FTP site:

https://www.ncdc.noaa.gov/crn/qcdatasets.html

### 8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

USCRN data have been in use for 18 years, and have been the basis for a number of papers. For listing, see saved Archive Request form version dated 06/25/2012 20:52:07.

## 9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

The subhourly, hourly, daily and monthly FTP products have been archived since 2013. As of 2019-02-28, USCRN will now archive a "Standardized Soil Moisture" product. The initial archival of "Standardized Soil Moisture" will contain data from 2009 to present, followed by monthly updates.

### 10. List the input datasets and ancillary information used to produce the data.

The USCRN is described at:

https://www.ncdc.noaa.gov/crn/

The FTP products, their descriptions and formats can be found at:

https://www.ncdc.noaa.gov/crn/qcdatasets.html

### 11. List web pages and other links that provide information on the data.

https://www.ncdc.noaa.gov/crn/qcdatasets.html

- 12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
- 1. CRN website: https://www.ncdc.noaa.gov/crn/
- 13. Indicate the data file format(s).

1. ASCII

### 14. Are the data files compressed?

No

# 15. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).

See AB-SA-01437 (Submission Agreement for U.S. Climate Reference Network (USCRN) Processed Data and Products) for details: ShortName\_typeformatVersion\_databaseVersion\_cYYYYmmdd.Ext

# 16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

The FTP products can be found at:

https://www.ncdc.noaa.gov/crn/qcdatasets.html

### 17. What is the total data volume to be submitted?

### Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume: 100GB Number of Data Files: 100

### Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 7GB per Month

Data File Frequency: 5 per Month
Data Production Start: 2000-11-27

### 18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

The data being archived may change in three ways:

- 1. The entire data set is reprocessed using new and better algorithms.
- 2. Parts of the data are reprocessed due to manual quality control changes or new data availability (from PDAs).

### 19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: Asheville, NC

System Name: crn-prod.ncdc.noaa.gov

System Owner: DOC/NOAA/NESDIS/NCEI > National Centers for Environmental

Information, NESDIS, NOAA, U.S. Department of Commerce

Additional Information: Add comments as needed on applicable data types, etc.

- 20. What are the possible methods for submitting the data to NCEI? Select all that apply.
- 1. FTP PULL
- 2. FTP PUSH
- 21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.
- 22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

### 23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

The data to be archived here are the USCRN/USRCRN data that are quality controlled and made available to the public via FTP. Derived variables that are calculated from the raw quality controlled data will also be included in the archived data, as the methods change at times so versions must be retained.

### 24. Are the data archived at another facility or are there plans to do so? Please explain.

No

### 25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

See AB-SA-01437 (Submission Agreement for U.S. Climate Reference Network (USCRN) Processed Data and Products)

### 26. Do you have a data management plan for your data?

USCRN Data Management Plan submitted to NOAA IN August 2017 (updated):

 $https://www1.ncdc.noaa.gov/pub/data/uscrn/documentation/program/USCRN\_Data\_Management\_Plan-August\_2017.pdf$ 

### 27. Have funds been allocated to archive the data at NCEI?

CRN developers (specifically: Nancy Casey) have been tasked to make archiving USCRN data a priority.

### 28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

N/A

### 29. Is there a desired deadline for NCEI to archive and provide access to the data?

No deadlines for archive or access.

### 30. Add any other pertinent information for this request.

Please refer to the SA mentioned above for details on four products already being archived. This R2A covers those four products as well as the new Standardized Soil Moisture product.